

SYSTEM AND METHOD FOR CARDLESS SECURE CREDIT TRANSACTION
PROCESSING

ABSTRACT

In one embodiment, the system and device of the present invention extracts unique numerical information from a fingerprint. A fingerprint is first scanned and the scanned image is enhanced. The blurred area of the image is restored and the enhanced image is binarized. The binarized image is then thinned. A core point in the image is detected and minutiae within a given radius from the core point are detected. A number is then extracted from the image by computing relation of minutiae to the core point.

In one embodiment, the present invention provides a computer data encryption/decryption device and program that uses a fingerprint minutiae generated password to encrypt/decrypt credit card information before sending the information over a computer network. The system uses the finger print along with a public key infrastructure (PKI) and some image processing to ensure the security of the user's accounts.

RRT/111

DAH PAS361759.1--7/19/01 3:46 PM